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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,069	06/22/2001	Mikko Ohvo	P281445	1005

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EXAMINER	
ABELSON, RONALD B	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/869,069	OHVO ET AL.	
	Examiner	Art Unit	
	Ronald Abelson	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-12,14,18,19,21 and 23-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-12,14,18,19,21 and 23-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 23, 24, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah (US 6,400,695) in view of Gerszberg (US 6,850,533).

Regarding claim 23, 24, and 27, Chuah teaches a mobile communications system (fig. 1).

Chuah teaches a first connection leg supporting flow control on a lower transmission protocol level underlying a user level (fig. 1 see connection between box 2 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41). Note, applicant's background states LAC supports flow control on a lower transmission protocol level underlying a user level (spec: pg. 4 lines 1-2).

Chuah teaches an intermediate second connection leg not supporting flow control on the lower transmission level (fig. 1 see connection Node-B 'connected to box 2' to box 10 to box 14 to Node-B 'connected to box 4', ATM, col. 2 lines 53-58). Note, applicant's background states ATM does not supporting flow control on the lower transmission level (pg. 4 line 17-18).

Chuah teaches a third connection leg supporting flow control on the lower transmission protocol level (fig. 1 see connection between box 4 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41).

Chuah teaches a first network element of the mobile communications system between the first and second legs (fig. 1 box 6 that is connected to box 2).

Chuah teaches a second network element of the mobile communications system between the second and third legs (fig. 1 box 6 that is connected to box 4).

Chuah teaches the first leg is at the air interface between a mobile station and one of the network elements (fig. 1 box 2, WCDMA, col. 2 lines 1-5).

Chuah is silent on the first and second network elements are configured to tunnel lower level flow control information through the lower transmission protocol level of the second leg

between said first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer.

Gerszberg provides a method for tunneling lower level flow control information through the lower transmission protocol level of the second leg between said first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer (layer two forwarding, ATM tunneling, col. 24 lines 11-16).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Chuah by using ATM tunneling to tunnel flow control information across the ATM connection. This modification can be performed in software according to the teachings of Gerszberg. This modification would benefit the system since the second leg, ATM connection, does not support end-to-end flow control.

3. Claims 1, 14, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah (US 6,400,695) in view of Gerszberg (US 6,850,533), and further in view of Edholm (US 6,600,721).

Regarding claim 1, 14, and 28, Chuah teaches a mobile communications system (fig. 1).

Chuah teaches a first connection leg supporting flow control on a lower transmission protocol level underlying a user level (fig. 1 see connection between box 2 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41). Note, applicant's background states LAC supports flow control on a lower transmission protocol level underlying a user level (spec: pg. 4 lines 1-2).

Chuah teaches an intermediate second connection leg not supporting flow control on the lower transmission level (fig. 1 see connection Node-B 'connected to box 2' to box 10 to box 14 to Node-B 'connected to box 4', ATM, col. 2 lines 53-58). Note, applicant's background states ATM does not supporting flow control on the lower transmission level (pg. 4 line 17-18).

Chuah teaches a third connection leg supporting flow control on the lower transmission protocol level (fig. 1 see connection between box 4 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41).

Chuah teaches a first network element of the mobile communications system between the first and second legs (fig. 1 box 6 that is connected to box 2).

Chuah teaches a second network element of the mobile communications system between the second and third legs (fig. 1 box 6 that is connected to box 4).

Chuah teaches the first leg is at the air interface between a mobile station and one of the network elements (fig. 1 box 2, WCDMA, col. 2 lines 1-5).

Chuah is silent on the first and second network elements are configured to tunnel lower level flow control information through the lower transmission protocol level of the second leg between said first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer.

Gerszberg provides a method for tunneling lower level flow control information through the lower transmission protocol level of the second leg between said first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer (layer two forwarding, ATM tunneling, col. 24 lines 11-16).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Chuah by using ATM tunneling to tunnel flow control information across the ATM

connection. This modification can be performed in software according to the teachings of Gerszberg. This modification would benefit the system since the second leg, ATM connection, does not support end-to-end flow control.

Although the combination teaches tunneling, the combination is silent on tunneling to flow control information using in-channel/in-band signaling.

Edholm teaches flow control information using in-channel/in-band signaling (col. 1 lines 36-37).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Chuah and Gerszberg by tunneling the flow control information using in-band flow control. This modification can be performed according to the teachings of Edholm. This modification would benefit the system since separate bands for data and flow control would not be needed.

4. Claims 3, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Chuah, Gerszberg, and Edholm as applied to claim 1 above, and further in view of Newton.

Although the combination teaches tunneling higher layer flow control information through the ATM layer, the combination is silent on the lower transmission protocol level includes an ATM adaptation layer, as specified in claim 3; and encapsulating the flow control information in an ATM adaptation layer service data unit, transporting the ATM adaptation layer service data unit to the other end of the second leg in accordance with an ATM network protocol, extracting the flow control information from the ATM adaptation layer service data unit at said other end of the second leg, as specified in claim 4; and the second leg being an ATM connection tunneling said flow control information in ATM cells in an ATM layer through the ATM connection, as specified in claim 6.

Newton teaches the ATM adaptation layer is a link between the higher layers and the ATM layer and a method for encapsulating the flow control information in an ATM adaptation layer service data unit, transporting the ATM adaptation layer service data unit to the other end of the second leg in accordance with an ATM network protocol, extracting the flow control information from the ATM adaptation layer service data unit at said other end of the second leg, as specified in claim 4; and the second leg being an ATM connection tunneling said

flow control information in ATM cells in an ATM layer through the ATM connection (pg. 68-69).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Chuah, Gerszberg, and Edholm by encapsulating the LAC flow control information in an ATM adaptation layer service data unit, tunneling the ATM adaptation layer service data unit to the other end of the second leg in accordance with an ATM network protocol, extracting the flow control information from the ATM adaptation layer service data unit at said other end of the second leg. Adhering the ATM and ATM adaptation layer standards can perform this modification in. This modification would benefit the system by providing a method for the higher layer LAC flow control to be transmitted over the ATM network.

5. Claims 5 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Chuah, in view of Gerszberg, Newton, and Edholm.

Chuah teaches a data transmission method in a telecommunications system (fig. 1).

Chuah teaches transmitting data over a connection comprising a first leg supporting flow control on a lower

transmission protocol level underlying a user level (fig. 1 see connection between box 2 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41), an intermediate second leg not supporting flow control on the lower transmission level (fig. 1 see connection Node-B 'connected to box 2' to box 10 to box 14 to Node-B 'connected to box 4', ATM, col. 2 lines 53-58), and a third leg supporting flow control on the lower transmission protocol level (fig. 1 see connection between box 4 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41), wherein said second leg comprises an ATM connection (ATM, col. 2 lines 53-58).

Chuah is silent on tunneling lower level flow control information through the lower transmission protocol level of the second leg between said first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer.

Gerszberg provides a method for tunneling lower level flow control information through the lower transmission protocol level of the second leg between said first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer (layer two forwarding, ATM tunneling, col. 24 lines 11-16).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Chuah by using ATM tunneling to tunnel flow control information across the ATM connection. This modification can be performed in software according to the teachings of Gerszberg. This modification would benefit the system since the second leg, ATM connection, does not support end-to-end flow control.

Although the combination teaches ATM, the combination is silent on an ATM adaptation layer and encapsulating the flow control in the ATM adaptation layer by inserting an octet or a bit or bits carrying the flow control information with a limited amount of user data in the payload of the ATM adaptation layer service data unit, transporting the ATM adaptation layer service data unit to the other end of the second leg in accordance with an ATM network protocol, and extracting the flow control information from the ATM adaptation layer service data unit at said other end of the second leg.

Newton teaches an ATM adaptation layer and a method for encapsulating the flow control in the ATM adaptation layer by inserting an octet or a bit or bits carrying the flow control information ATM adaptation layer service data unit, transporting the ATM adaptation layer service data unit to the other end of

the second leg in accordance with an ATM network protocol, and extracting the flow control information from the ATM adaptation layer service data unit at said other end of the second leg.

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Chuah and Gerszberg, by encapsulating the LAC flow control information in an ATM adaptation layer service data unit, tunneling the ATM adaptation layer service data unit to the other end of the second leg in accordance with an ATM network protocol, extracting the flow control information from the ATM adaptation layer service data unit at said other end of the second leg. Adhering the ATM and ATM adaptation layer standards can perform this modification in. This modification would benefit the system by providing a method for the higher layer LAC flow control to be transmitted over the ATM network.

The combination is silent on by inserting an octet or a bit or bits carrying the flow control information with a limited amount of user data in the payload of the ATM adaptation layer service data unit.

Edholm teaches a method for inserting an octet or a bit or bits carrying the flow control information with a limited amount

of user data in the payload of the ATM adaptation layer service data unit (in-band signaling, col. 1 lines 36-37).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Chuah, Gerszberg, and Newton by tunneling the flow control information using in-band flow control. This modification can be performed according to the teachings of Edholm. This modification would benefit the system since separate bands for data and flow control would not be needed.

6. Claims 7, 18, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah (US 6,400,695) in view of Gerszberg (US 6,850,533), and further in view of Williams (US 6,317,455).

Chuah teaches a mobile communications system (fig. 1).

Chuah teaches a first connection leg supporting flow control on a lower transmission protocol level underlying a user level (fig. 1 see connection between box 2 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41). Note, applicant's background states LAC supports flow control on a lower transmission protocol level underlying a user level (spec: pg. 4 lines 1-2).

Chuah teaches an intermediate second connection leg not supporting flow control on the lower transmission level (fig. 1 see connection Node-B 'connected to box 2' to box 10 to box 14 to Node-B 'connected to box 4', ATM, col. 2 lines 53-58). Note, applicant's background states ATM does not supporting flow control on the lower transmission level (pg. 4 line 17-18).

Chuah teaches a third connection leg supporting flow control on the lower transmission protocol level (fig. 1 see connection between box 4 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41).

Chuah teaches a first network element of the mobile communications system between the first and second legs (fig. 1 box 6 that is connected to box 2).

Chuah teaches a second network element of the mobile communications system between the second and third legs (fig. 1 box 6 that is connected to box 4).

Chuah teaches the first leg is at the air interface between a mobile station and one of the network elements (fig. 1 box 2, WCDMA, col. 2 lines 1-5).

Chuah is silent on the first and second network elements are configured to tunnel lower level flow control information through the lower transmission protocol level of the second leg

between said first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer.

Gerszberg provides a method for tunneling lower level flow control information through the lower transmission protocol level of the second leg between said first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer (layer two forwarding, ATM tunneling, col. 24 lines 11-16).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Chuah by using ATM tunneling to tunnel flow control information across the ATM connection. This modification can be performed in software according to the teachings of Gerszberg. This modification would benefit the system since the second leg, ATM connection, does not support end-to-end flow control.

Although the combination teaches tunneling, the combination is silent on tunneling to flow control information using an out-of-traffic channel.

Williams teaches flow control information using an out-of-traffic channel (col. 5 lines 32-36).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Chuah and Gerszberg by tunneling the flow control information using an out-of-traffic channel. This modification can be performed according to the teachings of Williams. This modification would benefit the system since by having two separate channels, more bandwidth can be devoted to transmitting the data.

7. Claims 8 - 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Chuah, in view of Gerszberg, Newton, and Edholm.

Regarding claims 8 - 12, Chuah teaches a data transmission method in a telecommunications system (fig. 1).

Chuah teaches transmitting data over a connection comprising a first leg supporting flow control on a lower transmission protocol level underlying a user level (fig. 1 see connection between box 2 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41), an intermediate second leg not supporting flow control on the lower transmission level (fig. 1 see connection Node-B 'connected to box 2' to box 10 to box 14

to Node-B 'connected to box 4', ATM, col. 2 lines 53-58), and a third leg supporting flow control on the lower transmission protocol level (fig. 1 see connection between box 4 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41), wherein said second leg comprises an ATM connection (ATM, col. 2 lines 53-58).

Chuah is silent on tunneling lower level flow control information through the lower transmission protocol level of the second leg between said first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer.

Gerszberg provides a method for tunneling lower level flow control information through the lower transmission protocol level of the second leg between said first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer (layer two forwarding, ATM tunneling, col. 24 lines 11-16).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Chuah by using ATM tunneling to tunnel flow control information across the ATM connection. This modification can be performed in software according to the teachings of Gerszberg. This modification would

benefit the system since the second leg, ATM connection, does not support end-to-end flow control.

Although the combination teaches ATM, the combination is silent on an ATM adaptation layer.

Newton teaches an ATM adaptation layer (pg. 68 - 69).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Chuah and Gerszberg, by tunneling the higher level LAC flow control through the ATM network via the ATM adaptation layer. Adhering the ATM and ATM adaptation layer standards can perform this modification in. This modification would benefit the system by providing a method for the higher layer LAC flow control to be transmitted over the ATM network.

Regarding claims 8 and 10, the combination is silent on recognizing at a first node between the first and second legs a need to start a flow control towards the second leg, sending a flow control ON request over the second leg, receiving the flow control ON request at a second node between the second and third legs, stopping sending new data or decreasing data rate from the second node to the first node over the second leg in response to

the flow control ON request.

Edholm teaches a method for recognizing at a first node between the first and second legs a need to start a flow control towards the second leg, sending a flow control ON request over the second leg, receiving the flow control ON request at a second node between the second and third legs, stopping sending new data or decreasing data rate from the second node to the first node over the second leg in response to the flow control ON request (data 'off', col. 1 lines 36-44). The examiner corresponds the applicant's 'flow control ON request' with the data 'off' signal of the reference.

Regarding claims 9 and 11, the combination is silent on recognizing at the first node a need of stopping the flow control towards the second leg, sending a flow control OFF request over the second leg, receiving the flow control OFF request at the second node, starting sending new data or increasing data rate from the second node to the first over the second leg in response to said flow control off request.

Edholm teaches a method for recognizing at the first node a need of stopping the flow control towards the second leg, sending a flow control OFF request over the second leg, receiving the flow control OFF request at the second node,

starting sending new data or increasing data rate from the second node to the first over the second leg in response to said flow control off request (data 'on', col. 1 lines 36-44). The examiner corresponds the applicant's 'flow control OFF request' with the data 'on' signal of the reference.

Regarding claim 12, the combination is silent on recognizing the need for starting or stopping the flow being based on the status of a receiving or transmitting buffer in the first node or on incoming flow control information received over the first leg.

Edholm teaches recognizing the need for starting or stopping the flow being based on the status of a receiving or transmitting buffer in the first node or on incoming flow control information received over the first leg (off signal stops flow of data until data within buffer is consumed, col. 1 lines 36-44).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Chuah, Gerszberg, and Newton by stopping or starting the sending of data between nodes according to the teachings of Edholm. This modification can be performed in software. This modification

would benefit the system by preventing overflow in the receiving buffer and allowing for the restarting of the transmission.

8. Claims 19, 21, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah, in view of Gerszberg and Edholm.

Regarding claims 19, 21, 25, and 26, Chuah teaches a mobile communications system (fig. 1).

Chuah teaches a first connection leg supporting flow control on a lower transmission protocol level underlying a user level (fig. 1 see connection between box 2 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41). Note, applicant's background states LAC supports flow control on a lower transmission protocol level underlying a user level (spec: pg. 4 lines 1-2).

Chuah teaches an intermediate second connection leg not supporting flow control on the lower transmission level (fig. 1 see connection Node-B 'connected to box 2' to box 10 to box 14 to Node-B 'connected to box 4', ATM, col. 2 lines 53-58). Note, applicant's background states ATM does not supporting flow control on the lower transmission level (pg. 4 line 17-18).

Chuah teaches a third connection leg supporting flow control on the lower transmission protocol level (fig. 1 see connection between box 4 and 6, WCDMA, col. 2 lines 1-5, fig. 2 LAC, col. 2 lines 39-41).

Chuah teaches a first network element of the mobile communications system between the first and second legs (fig. 1 box 6 that is connected to box 2).

Chuah teaches a second network element of the mobile communications system between the second and third legs (fig. 1 box 6 that is connected to box 4).

Chuah teaches the first leg is at the air interface between a mobile station and one of the network elements (fig. 1 box 2, WCDMA, col. 2 lines 1-5).

Chuah is silent on the first and second network elements are configured to tunnel lower level flow control information through the lower transmission protocol level of the second leg between said first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer.

Gerszberg provides a method for tunneling lower level flow control information through the lower transmission protocol level of the second leg between said first and third legs in

order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer (layer two forwarding, ATM tunneling, col. 24 lines 11-16).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Chuah by using ATM tunneling to tunnel flow control information across the ATM connection. This modification can be performed in software according to the teachings of Gerszberg. This modification would benefit the system since the second leg, ATM connection, does not support end-to-end flow control.

Regarding claims 19 and 25, the combination is silent on the first and second nodes are arranged to recognize a need to start or stop flow control towards the second leg and to send a flow control ON request or a low control OFF request, respectively, over the second
leg, and the first and second peer entities are responsive to receiving the flow control ON request or the flow control OFF request for stopping or starting, respectively, the sending, or decreasing and increasing data rate, respectively, of data towards the second leg.

Edholm teaches a method for first and second nodes

are arranged to recognize a need to start or stop flow control towards the second leg and to send a flow control ON request or a low control OFF request, respectively, over the second leg, and the first and second peer entities are responsive to receiving the flow control ON request or the flow control OFF request for stopping or starting, respectively, the sending, or decreasing and increasing data rate, respectively, of data towards the second leg (data 'on', data 'off', col. 1 lines 36-44).

Regarding claims 21 and 26, the combination is silent on recognizing the need for starting or stopping the flow being based on the status of a receiving or transmitting buffer in the first node or on incoming flow control information received over the first leg.

Edholm teaches recognizing the need for starting or stopping the flow being based on the status of a receiving or transmitting buffer in the first node or on incoming flow control information received over the first leg (off signal stops flow of data until data within buffer is consumed, col. 1 lines 36-44).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Chuah and Gerszberg, by stopping or starting the sending of data between nodes according to the teachings of Edholm. This modification can be performed in software. This modification would benefit the system by preventing overflow in the receiving buffer and allowing for the restarting of the transmission.

Response to Arguments

9. Applicant's arguments with respect to claims 1, 3-12, 14, 18, 19, 21, and 23-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (571) 272-3165. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization

where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronald Abelson
Examiner
Art Unit 2616

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CHI PHAM
SUPERVISORY PATENT EXAM 5/12/06